

Quality Assurance Report

Final Project Report - 2023

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Executive Summary

The Quality Assurance Report (QAR) Program, which includes assessment and coaching, is a continuous improvement process to support early childhood programs. In 2022, Missouri Department of Elementary and Secondary Education Office of Childhood (DESE OOC) contracted with the Early Childhood Innovation Center (ECIC) at the University of Missouri-Kansas City-Institute for Human Development (UMKC-IHD) to implement the QAR Pilot Program for a sixth cohort of 250 classrooms in 50 early childhood programs. The project was expanded in 2023 by enrolling new programs (some from Cohorts 1-5) for a total of 500 classrooms. An additional 250 classrooms were added in Fall 2023. For all classrooms, DESE OOC is using the Classroom Assessment Scoring System® (CLASS). This report describes the first two years of implementation of the program.

Since February 2022, ECIC completed the launch and installation of the project. This included assigning or hiring highly qualified staff members, onboarding new staff, training staff in the assessment instruments, and training staff in the coaching model. This year, ECIC incorporated CLASS affiliate trainers to the QAR team. This action directly supports state-wide capacity-building for QAR implementation. Early childhood quality specialists (ECQS) are located throughout the state to ensure comprehensive program implementation.

Installation also included contacting and enrolling early childhood programs to confirm their participation in the cohort. To date, 88 programs representing 698 classrooms are enrolled. Slight changes to the initial classroom assessment protocols include shifting from the CLASS Pre-K assessment instrument to the Second Edition of the CLASS Pre-K assessment instrument and adding the CLASS Infant/Toddler and CLASS Pre-K Environments tool. Missouri is on the forefront of implementation with these instruments since they were published within the past year. Preliminary CLASS data are available for 548 classrooms (89 infant classrooms, 172 toddler classrooms, and 287 Pre-K classrooms). Overall, scores are slightly higher than national norms.

Coaching sessions occurred on a regular basis and reports were analyzed. A total of 4,643 coaching visits with educators were completed in 2023. Coaching sessions mostly occurred in-person (74.5%). The majority of coaching interactions focused on building partnerships (44.7%), which is the foundation of Practice-Based Coaching. For 34.2% of visits, the focus was on shared goals and action planning. Educators' feedback indicate they are reflecting on their practices (4.49), improving on their practices (4.35), and deciding their own goals (4.37). Educators reported less efficacy in making progress on their goals (3.84); however, many of them have only recently engaged in coaching, so it is expected that goal attainment ratings will improve over time.

Results suggest that using CLASS for the QAR program is a promising approach. It appears that the design of the program and the coaching model are scalable, feasible, and well-received by program administrators. Baseline data collected and analyzed in this work will be used to

examine the effects of data-informed coaching. This study can be used to inform future efforts regarding quality improvements in early childhood programs in Missouri.

Background

In December 2019, DESE received a Preschool Development Grant Birth to Five (PDG B-5) grant from the U.S. Administration for Children and Families, U.S. Department of Health and Human Services (DHHS) and the U.S. Department of Education (DOE). This grant provides funding to coordinate a “more effective, high-quality early learning system that prepares children to be ready for school.” One activity for the PDG B-5 grant is to pilot the Quality Assurance Report (QAR), a continuous improvement process for early learning programs and to provide families with information about quality programs. The Pilot Program is authorized by the Missouri Legislature. The QAR employs evidence-based practices with a goal to ensure that all children have access to high-quality early childhood care and education (ECCE). The project is designed to intentionally include children with disabilities, special health care needs, and those in rural areas with limited access to early childhood programs.

Since 2019, five cohorts of early childhood programs participated in the QAR Pilot Project. Their participation included evidence-based classroom environment assessments and on-site consultation from early childhood professionals. The DESE OOC was interested in exploring a different model for the sixth cohort, using the *Classroom Assessment Scoring System*^{®i,ii,iii} (CLASS). CLASS is an observational assessment tool and a recognized quality improvement system that measures teacher-child interactions. DESE OOC is also interested in testing the efficacy of a model that provides assessment and technical support related to program administration, before providing supports in classrooms.

Project Design

In 2022, DESE OOC contracted with the ECIC to implement the QAR Program for Cohort #6 and evaluate its effectiveness. The work plan included assessing approximately 250 classrooms in 50 programs. In 2023, DESE OOC expanded the contract with the ECIC to implement the QAR project with all currently participating programs and additional newly enrolled programs. This work plan involves serving a total of 500 classrooms.

Programs new to the project were encouraged to attend a virtual orientation webinar. These webinars were offered at multiple days and times. Webinars outlined timelines, project design, and coaching implementation. After the webinar, the programs were contacted to begin the coaching process. This includes a packet of information that outlines the coaching agreement, information about the assessment tools, and information about coaching implementation. The first visit with the teacher included reviewing the coaching agreement and coaching model, a focused process of getting to know the teacher, and defining preferred coaching strategies. The second visit with the teacher included information regarding assessments, as well as initial goal planning.

ECIC conducted a comparative study to examine the effectiveness of two models:

Model # 1: Classrooms are assessed using the CLASS instrument and teachers engage in coaching for continuous quality improvement (CQI) focusing on effective teaching practices over a period of 16 months.

Model #2: In addition to classroom assessments using the CLASS, programs in Model 2 are also assessed regarding administrative policies and practices using three instruments: the *Program Administration Scale*^{iv} (PAS), the *Organizational Equity Assessment*^v (OEA), and the *Early Childhood Work Environment Survey*^{vi} (ECWES). Administrators engaged in coaching and technical support for CQI at the program level during 2022, focusing on effective administrative practices. In 2023, ECIC re-assessed programs regarding administrative policies and practices to measure improvement. If programs showed progress and met an established program quality threshold, they received CQI coaching at the classroom level, focusing on effective teaching practices for the remainder of 2023. If programs did not meet the quality threshold, they continued to receive coaching on administrative practices for the duration of the project.

For the comparative study, ECIC is using a pre-/post- research design to measure improvement over time, with classroom interactions (CLASS scores) as the primary outcome variable. Programs were randomly assigned to either Model #1 or Model #2. All classrooms, regardless of their model assignment, received initial CLASS assessments to establish a baseline measurement and a second assessment (at Time 2) using the CLASS at the end of the study. The comparative analysis will show change-over-time for the two models. A final report will be prepared in summer 2024 to describe the process and outcomes of the study.

ECIC is using the Practice-Based Coaching^{vii} (PBC) model for structured coaching implementation. PBC is a cyclical process for supporting teaching and administrative staff's use of effective practices that lead to positive outcomes for children and programs. Fundamental to PBC is Establishing the Partnership, an essential element to coaching cycle components that ensures collaboration between the coach and coachee. The coaching cycle components are: 1) Shared goals and action planning; 2) Focused observations; and 3) Reflection and feedback. ECIC is using a hybrid-coaching format, with monthly on-site coaching sessions, and monthly virtual coaching visits with teachers and administrators.

Classroom interactions using the CLASS continue to be used, along with an environmental assessment using the CLASS Environments. PBC model for structured coaching interventions continues to be the method for interactions between ECQS and educators.

Process Evaluation

ECIC Staffing

ECIC assigned multiple staff in a variety of roles to work on the QAR Project. Staff roles include principal investigator, project coordinator, data analyst, team leads, ECQS, and logistical support staff.

ECQS are responsible for assessing and coaching programs. A total of 24 positions were available, with 21 of those positions filled by the end of 2023. Applicants were recruited from local, regional, and national networks including the Regional Hub network, the Missouri Association for the Education of Young Children, Missouri Head Start Association, the certified CLASS assessor registry, the American Educational Research Association, National Head Start Association, and the National Association for the Education of Young Children. These organizations were encouraged to forward the recruitment posting throughout the state and across the country. Specific requirements for the ECQS positions included:

- Bachelor's degree or higher,
- Experience in early childhood education,
- Experience working with adults (specifically training, coaching, or mentoring), and
- Willingness to engage in field-based, remote work (including travel within the state).

The QAR staff represent a highly qualified array of educational backgrounds and work experiences. Of the five staff that are in leadership positions with the project, two have doctoral degrees, one has an educational specialist degree, and two have master's degrees. Of the 21 ECQS, eleven (55%) have master's degrees and ten (45%) have bachelor's degrees. They also bring a broad range of experiences to the project: school district administration, early intervention, classroom-based instruction, early learning program management, music therapy, and non-profit administration.

Staff Onboarding. In addition to standard UMKC and ECIC on-boarding processes, staff for the ECQS positions participate in a series of on-going staff development activities.

- **Classroom Assessment Scoring System (CLASS) Reliability Training** – CLASS training is completed through synchronous, on-line training sessions for staff offered by Teachstone¹ initially and then by ECIC affiliate trainers. Staff then complete rigorous reliability testing through Teachstone for each of the three instruments: Infant, Toddler, and Pre-K.

¹ Teachstone, Inc., is the owner of the CLASS instrument and exclusively provides products and training for observer certification, on-going support, and training for the affiliate model. (<https://teachstone.com/products-and-trainings/>)

- **Practice-Based Coaching** - Coaches complete an online, asynchronous training on Practice-Based Coaching (PBC)², with a two-day follow-up training, either in-person or virtually.

Observation Tool Training and Reliability. To maintain fidelity with program implementation, ECIC requires ECQS to be trained and achieve reliability in the CLASS instruments to conduct observations. All of the ECQS were trained and achieved reliability in CLASS as reported in Table 1. They are also required to be trained in PBC before they enter the field for coaching duties.

Table 1. Observation Tool Reliability

Observation Tool	Number of Staff Trained	Percent Reliable
CLASS – Infant	26	100%
CLASS – Toddler	26	100%
CLASS – Pre-K (2 nd Edition)	27	100%
CLASS – Infant/Toddler Environments	26	N/A ³
CLASS – Pre-K Environments	23	N/A ³
CLASS – Pre-K Affiliate Trainer	7	100%
CLASS – Infant/Toddler Affiliate Trainer	4	100%

On-Going Program Staff Development

To ensure the remote program staff continue in their professional growth and to ensure consistency in program implementation, a variety of meetings are scheduled with staff on a regular basis.

- **Team Meeting** – The QAR project team gathers monthly to discuss program implementation. Topics have included human resources reminders, scheduling/training updates, coordination of service delivery, and other administrative topics. An agenda is provided, and agenda items are solicited prior to the staff meeting.
- **Professional Learning Community (PLC)** – Project team members meet twice monthly to engage in a robust book study. Team members rotate leading the PLC meeting. Team members completed the study of *Conscious Discipline: Building Resilient Classrooms*^{viii} in March 2023. Project team members were queried in February 2023 to select a topic for the next book study. Of the topics generated, ECQS requested further study in culturally competent coaching practices. The book *Hearing All Voices: Culturally Responsive*

² The Pyramid Model Consortium offers online training in the Practice-Based Coaching model (<https://www.pyramidmodel.org/>). The ECIC Leadership Team offers additional training the model for application in the QAR Program.

³ The CLASS – Infant/Toddler Environments and CLASS – Pre-K Environments were released in 2022 and tools for establishing reliability are not yet developed. The ECIC is participating in the reliability study for these instruments.

Coaching in Early Childhood^{ix} was selected and study began in May and continues through 2023.

- **Coaching Roundtable** – ECQS meet monthly to attend this open-format meeting where they bring questions and ideas centering around implementation of PBC with educators. This meeting is facilitated by the Team Leads.
- **Conference Attendance** – Selected QAR program staff attended and presented at conferences to contribute to their professional development and to represent the QAR Project to the greater early childhood community. Staff attended Conference on the Young Years, Teachstone InterAct, the National Association for the Education of Young Children Professional Learning Institute, the BUILD Conference, and the National Association for the Education of Young Children Annual Conference.

QAR Information Dissemination

Several activities for information dissemination about the QAR Program have been available throughout the first half of program implementation.

- **Conference on the Young Years (CYY)** – The QAR Project Coordinator presented two sessions at CYY in March 2023: *What is the Missouri Quality Assurance Report?* and *All About CLASS*. Each session was attended by approximately 35 educators. Also, ECIC hosted an informational booth at CYY. Approximately 600 informational fliers about the QAR project were distributed and 30 programs submitted applications as a result of this recruitment activity.
- **MO-SECA Leadership Academy** – QAR project fliers were included in participant packets for the Missouri Supporting Early Childhood Administrators (MO-SECA) Leadership Academy in March 2023. Approximately 219 administrators attended this academy.
- **InterAct Conference** – The first in-person conference hosted by Teachstone was held in April 2023 and attended by approximately 350 individuals from across the U.S., including the ECIC QAR project team. The QAR Project Coordinator presented a session: *Missouri Quality Assurance Report: Using CLASS to Improve Teaching Practices*. Also, the ECIC QAR leadership met with Bridget Hamre (author of the CLASS Instruments) and with Teachstone’s research and evaluation team to share about developments in the QAR and explore opportunities for collaboration.
- **InterAct Now!** – The virtual companion to the InterAct conference, InterAct Now! was held the first week of May 2023. The Project Coordinator presented two sessions at the conference: *Missouri Quality Assurance Report: Using CLASS to Improve Teaching Practices* and *Using Innovative Methods to Analyze CLASS Data for Targeted Coaching Interventions*.

Program Enrollment

There are 199 early learning programs with 698 classrooms enrolled in QAR. Of these, 107 classrooms continued from Cohorts 1-5, 200 classrooms are enrolled from Cohort 6, 189 classrooms were recruited and enrolled in Spring of 2023, and 202 classrooms were recruited and enrolled in Fall of 2023. Fall 2023 classrooms include Missouri Foundations for School Success and Missouri Quality Pre-K grantees. Table 2 reports information about the enrolled programs.

Table 2. Information about QAR Enrolled Programs (n=199)

	#	%
Number of Programs	199	
Number of Classrooms	689	
Program Size		
Family Child Care	5	2.5%
Small (1-5 classrooms)	143	71.9%
Large (6+ classrooms)	51	25.6%
Region (Classrooms)		
North Central	28	4.1%
Northwest	9	1.3%
Northeast	17	2.5%
Kansas City Area	84	12.2%
Central	108	15.7%
St. Louis Area	233	33.8%
Southwest	146	21.2%
Southeast	64	9.3%
Average Child Enrollment Capacity	63	
# of Programs Receiving State Subsidy	111	55.8%
# of Program Receiving Head Start Funding	23	11.6%

Outcome Evaluation

Classroom Assessments

CLASS Overview. The CLASS is an observational tool used to evaluate the process quality of early childhood classrooms. The CLASS focuses on observed teacher-child interactions through a series of four short observation rounds (15 – 20 minutes per round depending on the instrument used). After each observation round, each dimension is scored on a scale of 1 to 7. Scores are determined by scoring indicators for each dimension low, mid, or high. CLASS instruments are tailored to different age groupings: infant (0-18 months), toddlers (19-35 months), and preschool (3 – 5 years). Beginning in 2022, Teachstone published a revised and updated version of the Pre-K CLASS tool (2nd Edition). The QAR Project used this instrument to

assess preschool classrooms beginning in 2023, along with the CLASS Infant and CLASS Toddler instruments. Table 3 outlines the domains and dimensions for each CLASS instrument.

Table 3. Domains and Dimensions of the CLASS

Infant (Birth – 18 months)	Toddler (19 – 35 months)	Pre-K – 2 nd Edition (3-5 years old)
Responsive Caregiving <ul style="list-style-type: none"> • Relational Climate • Teacher Sensitivity • Facilitated Exploration • Early Language Support 	Emotional and Behavioral Support <ul style="list-style-type: none"> • Positive Climate • Negative Climate • Teacher Sensitivity • Regard for Child Perspectives • Behavior Guidance 	Emotional Support <ul style="list-style-type: none"> • Positive Climate • Negative Climate • Educator Sensitivity • Regard for Child Perspective
	Engaged Support for Learning <ul style="list-style-type: none"> • Facilitation of Learning and Development • Quality of Feedback • Language Modeling 	Classroom Organization <ul style="list-style-type: none"> • Behavior Management • Productivity • Instructional Learning Formats
		Instructional Support <ul style="list-style-type: none"> • Concept Development • Quality of Feedback • Language Modeling

CLASS Results. A total of 548 CLASS observations were completed through November 30, 2023. Of these, 89 Infant classrooms, 172 Toddler classrooms, and 287 Pre-K classrooms were assessed. There are 150 observations remaining that will be observed through December 2023, as well as some programs that are not opening until January 2024. Preliminary CLASS data show that, overall, scores in Missouri programs tend to be higher than the current national averages.

Scores are grouped by domains and use a seven-point scale. Scores of 1 to 2 are considered ineffective, 3 to 5 indicate a mix of effective and non-effective interactions, and 6 to 7 indicate effective interactions are consistent. There is one domain for infants, two domains for toddlers, and three domains for Pre-K children.

The average infant domain score for Responsive Caregiving was 4.65. The toddler score for Emotional and Behavioral Support was 5.32 and 3.18 for Engaged Support for Learning. For Pre-K, Emotional Support averaged 5.71, Classroom Organization averaged 5.15, and Instructional Support averaged 2.89.

The relational climate/positive climate and teacher sensitivity dimensions are the highest scoring items in the mid-high range, with scores of ranging from 5.44 – 5.88. Dimensions regarding implementing concept-related content to children and language support were in the low to low-mid range, with scores ranging from 2.59 – 3.50. These initial results are consistent with reported national averages. Domain and dimension average scores are reported in Table 4.

Table 4. Class Instrument Preliminary Average Scores

CLASS Instrument	Average Score	SD	National Average
CLASS Infant (n=89)			
Responsive Caregiving	4.65	1.02	-
Relational Climate	5.44	0.92	5.04
Teacher Sensitivity	5.26	1.07	4.75
Facilitated Exploration	4.13	1.35	3.68
Early Language Support	3.88	1.20	3.31
CLASS Toddler (n=172)			
Emotional and Behavioral Support	5.32	0.79	-
Positive Climate	5.51	0.99	5.03
Negative Climate ¹	6.70	0.67	5.30
Teacher Sensitivity	5.12	1.07	4.33
Regard for Child Perspectives	4.62	1.07	4.36
Behavior Guidance	4.57	1.17	4.07
Engaged Support for Learning	3.18	0.87	-
Facilitation of Learning and Development	3.50	1.04	3.43
Quality of Feedback	2.70	0.95	-
Language Modeling	3.29	0.97	2.22
CLASS Pre-K (n=287)			
Emotional Support	5.71	0.72	-
Positive Climate	5.88	0.94	5.21
Negative Climate ⁴	6.76	0.39	6.37
Teacher Sensitivity	5.40	0.96	4.34
Regard for Student Perspective	4.83	0.99	4.36
Classroom Organization	5.15	0.95	-
Behavior Management	5.36	1.05	4.94
Productivity	5.44	1.06	5.41
Instructional Learning Formats	4.68	1.01	4.57
Instructional Support	2.89	0.79	-
Concept Development	2.59	0.85	2.69
Quality of Feedback	2.84	0.89	2.87
Language Modeling	3.26	0.94	2.85

CLASS Environment. Beginning in 2023, new programs also had the CLASS Environment assessments conducted in their classrooms. The CLASS Environment measure is a supplemental tool designed for use in conjunction with the CLASS observation. They describe and measure features of the environment that can support effective interactions. The CLASS Environment assessments are divided into two instruments: Infant-Toddler (birth – 35 months) and Pre-K - K (36 months – Kindergarten). The Infant-Toddler tool consists of 32 items (14 in Emotional and Behavioral Support and 18 in Engaged Support for Learning) and the Pre-K-K tool consists of 29 items (10 in Emotional Support, 8 in Classroom Organization, and 11 in Instructional Support). Items, scored on a scale of 1 to 3 (1 – no, none, never, 2 – few, some, limited, and 3 – most, many, varied), correlate with the CLASS dimensions for each tool.

Most Environment scores averaged in the “*few, some, limited*” range. The overall infant classroom average was 2.15, overall toddler average was 2.19, and overall preschool average was 2.46. Table 5 shows the results of the domain and dimension average scores for the CLASS Environment assessments for infant, toddler and Pre-K classrooms.

Table 5. CLASS Environment Average Scores

CLASS Environment Instrument	Average Score	SD
CLASS Environment Infant Classrooms (n=50)	2.15	0.29
Emotional and Behavioral Support	2.23	0.35
Arrangements	2.62	0.25
Displays	1.72	0.53
Materials	2.80	0.49
Arrangements/Displays/Materials	1.72	0.63
Engaged Support for Learning	2.05	0.27
Arrangements	2.66	0.36
Displays	1	0
Materials	2.07	0.29
Arrangements/Displays/Materials	1.74	0.36
CLASS Environment Toddler Classrooms (n=107)	2.19	0.30
Emotional and Behavioral Support	2.27	0.33
Arrangements	2.66	0.24
Displays	1.89	0.54
Materials	2.87	0.40
Arrangements/Displays/Materials	2.24	0.43
Engaged Support for Learning	2.12	0.31
Arrangements	2.76	0.26
Displays	1.35	0.64
Materials	2.24	0.32
Arrangements/Displays/Materials	1.99	0.44

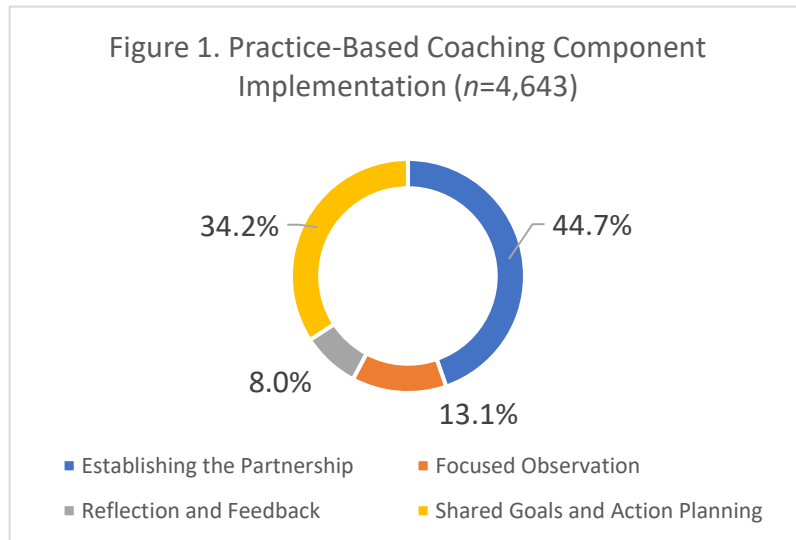
CLASS Environment Pre-K Classrooms (n=202)	2.46	0.24
Emotional Support	2.66	0.21
Arrangements	2.65	0.32
Displays	2.43	0.53
Materials	2.95	0.22
Arrangements/Displays/Materials	2.29	0.47
Classroom Organization	2.54	0.27
Arrangements	2.84	0.23
Displays	2.02	0.66
Materials	2.78	0.26
Instructional Support	2.16	0.35
Displays	1.86	0.69
Materials	2.22	0.37
Displays/Materials	2.37	0.37

Coaching

Program administrators and teachers receive individual feedback, delivered by their assigned ECQS. The ECQS meet with the program director for center-based educators to debrief assessment scores, review coaching expectations through review of the Coaching Agreement, and share how educator goals will be shared. Specialists then engage in coaching with educators using the PBC model. The initial educator visit includes discussion of the Coaching Agreement and the implementation of different coaching strategies, gathering input into preferred coaching strategies to guide coaching activities. Subsequent visits involve sharing individual classroom assessment scores, completing individual needs assessments on identified teaching practices, and beginning the PBC coaching cycles starting with goal and action planning, following with the remain components of focused observation and reflection and feedback.

Practice-Based Coaching. A total of 4,643 coaching visits occurred through November 30, 2023 totaling 2,476.7 hours of coaching with classroom educators. Coaching sessions mostly occurred in-person (74.5%). Coaching activities are reported for each coaching interaction with an educator. The majority of coaching interactions focused on Establishing the Partnership

(44.7%). This follows the expectation for the Practice-Based Coaching model to build relationships with educators as the first step of the coaching relationship and to continue that throughout all interactions. (See Figure 1.)



Coaches reported which coaching strategies they used during coaching sessions. Coaches could indicate use of multiple strategies during coaching sessions. Most frequently, coaches engaged in problem-solving conversations (43.8%), modeling teaching practices (29.2%), video examples from myTeachstone (25.4%), and providing other help in the practice setting (25.5%).

Coaches also self-rated how successful they felt each component of the PBC was implemented at each visit. On a scale of 1 (not at all successful) to 5 (very successful), coaches rated overall coaching a 4.27 or mostly successful.

An essential component of Practice-Based Coaching is for programs to self-select their own target goals. For infant educators, goals regarding early language support were most common (49%), followed by facilitated exploration (25%) and relational climate (14%). Nearly thirty percent of coaching visits in infant classrooms focused on teacher talk. For toddler educators, most educators chose a goal in the language modeling (28%) or behavior guidance (32%) dimensions. In preschool classrooms, educators most frequently set goals in the behavior management (25%), concept development (17%), productivity (15%), and language modeling (14%) dimensions.

Goal status was also recorded. Educators created 1,118 goals in 2023. This, combined with the visits where goals were modified, comprised 26.8% of coaching visits. Of these, goals were met 320 times, which was 28.6% of goals set. On-going progress for work on goals constituted the remainder of coaching visits.

Coaching Session Feedback. A Coaching Session Feedback Survey was created to obtain on-going feedback from program participants about their experiences in the program. This brief survey is designed to be completed at the conclusion of each coaching visit in less than five

minutes. Respondents also have the option to request contact by the project coordinator and can provide any other feedback to the QAR team. Respondents rated themselves on the following questions, on a scale of 1 – *No/Not At All* to 5 - *Extremely*:

- To what degree do you feel you were able to decide the goals and steps you are going to work on?
- To what degree do you feel you are making progress on your goal?
- The interactions with my coach helped me to improve my practice?
- The discussion with my coach prompted me to reflect about my practice in a meaningful way?

Through November 2023, 2,082 surveys were gathered (44.8%). Overall, program participants feel that they are reflecting on their practices (4.49), improving on their practices (4.35), and deciding on their own goals (4.37). Educators reported less efficacy in making progress on their goals (3.84); however, many of the educators currently served through the project have only recently engaged in coaching, so this is not an unexpected finding.

Comments from educators were gathered on feedback surveys. A sampling of comments includes:

- *"[My coach] is so pleasant, friendly and helpful. I'm confident she will build strong coaching relationships with our teachers."*
- *"[My coach] is very approachable and I really enjoy and feel comfortable working with her."*
- *"[My coach] is very willing to listen to my ideas and help putting them into action."*
- *"[My coach] gave me examples of what I did correctly and how I could improve on my wording for scaffolding!"*
- *"Excellent program. This has helped me become a better teacher! I think more teachers should be included! Thank you."*
- *"[My coach] is an amazing coach. She has made me feel so comfortable and it's easy to be myself and actually be in full teacher mode with out(sic) the anxiety of having someone watching me."*
- *"[My coach] gave me much needed support and advice. She is helping me to be better every day and to practice having a better mindset."*
- *"I loved all the conversations and reflections I had today during the visit. I feel confident going forward with the goals we discussed."*
- *"[My coach] has provided me with so much information that I didn't know I needed and it has helped me so much in my everyday work life. I have a more meaningful connection with my children while helping them grow and I can't thank her enough. I'm very excited to see what the future holds and what else I will learn and implement in my classroom."*
- *"[My coach] did a great job of explaining our program results with us and helped us. She did great on explaining each area and also ways we can work to improve areas of*

concerns. She did great listening and was very positive. We are excited for her to start working with our program!"

- *"Looking forward to taking advantage of all the resources, implementing them in the classroom , and sharing what I learned with my co teachers."*
- *"Thank you [coach] for helping me rethink about how the activity went! It was great to have another opinion with a different outlook!"*
- *"This is so helpful to not only reflect but also to stop and focus on more productive planning for my classroom."*
- *"We really appreciate [coach] and how she is so involved and excited to be helping. She gives us encouragement and it really helps us want to grow and learn with her! Couldn't ask for a better coach!"*

Communities of Practice

In Fall of 2023, the QAR program began Communities of Practice (CoP) for all QAR participants, including lead educators, assistants, and administrators. CoPs were designed to create an on-line space for participants to engage in meaningful learning, discussion, and collaboration with other professionals around a central topic. To determine facilitation topics, ECIC Content Specialists reviewed aggregate CLASS data and topics frequently arising in coaching with educators. Three CoP interest areas were created: Language and Literacy, Supporting Educator Growth, and Classroom Connections. Sessions, conducted in the evenings, were facilitated through Canvas, the on-line learning management software through UMKC and participants attend via Zoom. CoP sessions are approved for one-hour of clock hour credit through the MOPD system.

Sessions were held in November and December and will continue in 2024. Session topics and attendance are reported in Table 6.

Table 6. Community of Practice Topic and Attendance.

Date of Session	Topic	Audience	Attendance
November 8, 2023	Supporting Educator Growth: Pedagogical Leadership	Program administrators and family childcare providers	4
November 7, 2023	Empathy as a Superpower	Classroom educators, program administrators, and family child care providers	14
November 9, 2023	Language and Literacy	Classroom educators, program administrators, and family child care providers	17
December 5, 2023	Supporting Educator Growth: Reflective Supervision	Program administrators and family childcare providers	3
December 11, 2023	Communicating Behavior Expectations So Young Children Can Learn	Classroom educators, program administrators, and family child care providers	6
December 18, 2023	Beyond words and conversations	Classroom educators, program administrators, and family child care providers	11

Post-session evaluation data from participants were positive overall regarding meeting experience and discussion topics. All participants felt that community engagement guidelines were followed. When asked how much participants valued the time to get to know one another, 75% stated that they did. Most participants (75%) indicated that they identified a new strategy or idea to help them in their role. Over half of respondents, 58%, stated that they learned about a new resource.

Comparison Study

Overview. Program Administration Scale – Second Edition^x (PAS) is a research-based assessment instrument used to evaluate the leadership and management practices in center-based early learning programs. The PAS measures quality on a 7-point scale, with markers describing practices from inadequate (1) to excellent (7). The scale is comprised of 25 items grouped in 10 subscales: human resources development, personnel cost and allocation, center operations, child assessment, fiscal management, program planning and evaluation, family partnerships, marketing and public relations, technology, and staff qualifications. To score indicators, the assessor interviews the program administrator and reviews documentation to verify indicators.

For the purposes of the QAR Cohort #6 study, some modifications were made with scale implementation. First, programs were not required to gather and present documentation at assessment. This was to give programs a “soft” introduction to the assessment tool, as well as

extend the time programs have to gather documents. Second, the staff qualifications subscale was not rated. This allows programs time to focus on leadership and management practices in the program. Significant changes to staff qualifications would likely require more time than this study offers.

PAS Results. The PAS was conducted with 22 programs at Time 1 and 14 programs at Time 2. Programs were distributed across the state: 8 in the St. Louis region, 5 in central region, 4 in the southwest region, 3 in the Kansas City region, and 2 in the northwest region. Assessments were completed for Time 1 in April – May 2022 and April – May 2023 for Time 2.

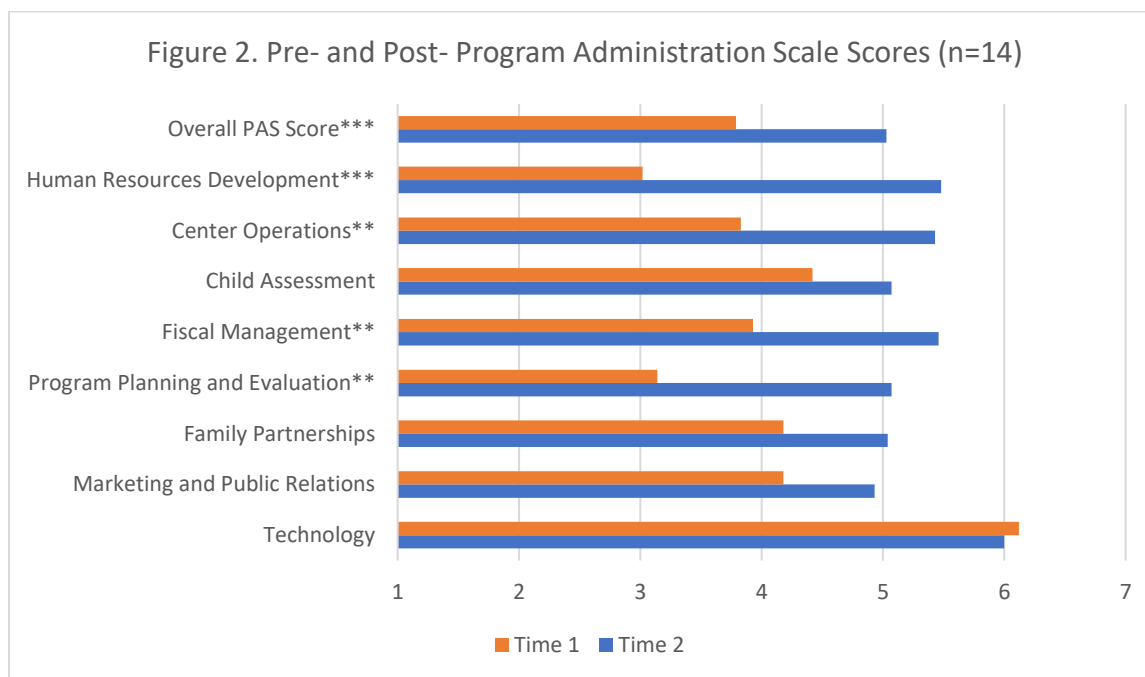
Initial program overall scores ranged from 2.00 to 5.67, with a mean score of 3.58. National PAS data norms^{xi} report a mean score of 3.60, indicating that programs in Model 2 align with overall national quality. Mean national norm scores are reported in Table 7.

Table 7. Average PAS Scores at Pre- and Post-Assessment

	Time 1 (n=22)	Time 2 (n=14)	National Norm (n=564)
Overall PAS Score	3.58	5.03	3.60
Human Resources Development	2.60	5.48	3.42
1. Staff Orientation	2.64	6.29	2.88
2. Supervision and Performance Appraisal	2.45	5.50	3.37
3. Staff Development	2.73	4.64	4.01
Personnel Cost and Allocation	2.33	3.33	2.63
4. Compensation	2.55	3.50	3.04
5. Benefits	1.73	2.57	2.00
6. Staffing Patterns and Scheduling	2.73	3.93	2.85
Center Operations	3.68	5.43	3.30
7. Facilities Management	4.73	6.00	4.49
8. Risk Management	4.18	5.86	2.50
9. Internal Communications	2.14	4.43	2.40
Child Assessment	3.91	5.07	5.00
10. Screening for Special Needs	3.73	4.57	4.50
11. Assessment in Support of Learning	4.09	5.57	5.50
Fiscal Management	3.98	5.46	3.48
12. Budget Planning	3.95	5.21	3.35
13. Accounting Practices	4.00	5.71	3.61
Program Planning and Evaluation	2.77	5.07	3.22
14. Program Evaluation	2.95	5.36	3.62
15. Strategic Planning	2.59	4.79	2.81
Family Partnerships	4.00	5.04	4.05
16. Family Communications	3.05	4.79	3.26
17. Family Support and Involvement	4.95	5.29	4.84

Marketing and Public Relations	4.16	4.93	3.78
18. External Communication	4.36	5.57	3.97
19. Community Outreach	3.95	4.29	3.58
Technology	5.84	6.00	4.29
20. Technological Resources	6.86	6.14	3.68
21. Use of Technology	4.82	6.56	4.90

Pre- and Post-Assessment PAS Scores. When comparing matched scores for the 14 programs with both pre- and post-assessments, significant gains were seen in all but one subscale. It is important to note that the subscale that saw the most statistically significant growth, Human Resources Development, was the most frequent focus (46%) of coaching visits. Center Operations and Program Planning and Evaluation each represented 10% of coaching visits, respectively. Pre- and post-test average scores are reported in Figure 2⁴.

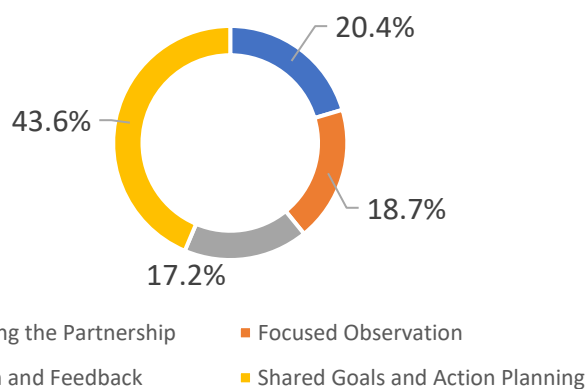


⁴ *** - $p < .001$, ** - $p = .01$

Coaching Implementation.

Overall, coaches conducted 144 hours of coaching within 161 administrative coaching visits. Visits followed the PBC model, with time spent in one of more of the four PBC components: establishing the partnership, shared goals and action planning, focused observation, and reflection and feedback. Coaches primarily spent time creating shared goals and action plans at 43.6% of visits. (See Figure 3.)

Figure 3. Practice-Based Coaching Component Implementation - Administrators (n=161)



Comparison of CLASS assessment pre- and post-assessment scores will be reported in 2024. Cohort 6 rating cycle will occur in Spring 2024.

Conclusions

Examination of the process for developing and launching the QAR program suggests the project is meeting objectives in a comprehensive and thorough way. Hiring and onboarding staff has become a smooth process with the addition of ECIC staff becoming CLASS Affiliate trainers for reliability. The addition of 10 coaches, for a total of 24, has increased capacity for service delivery to begin 2024. All staff are reliable on assessment instruments and receive continued support and supervision to ensure fidelity to coaching implementation. Rigorous training protocols and meaningful, on-going professional development were useful for building knowledge, skills, and confidence of the staff. The ECIC QAR leaders were successful in navigating the launch of the program towards state-wide implementation.

The robust baseline data collected thus far in the project are useful for understanding the nature of quality early learning programs in Missouri and will inform the further development of QAR. Feedback from both coaches and program participants suggest that educators are deeply considering aspects of their practice and beginning to make progress on goal attainment. PAS data exemplify this, suggesting that targeted coaching interventions can lead to successful practice change.

Assessment and coaching continue to operate at a steady pace. Coaching is monitored to maintain fidelity implementation. Beginning in 2024, the proposed model implementation will see adjustments to coaching delivery to support state-wide implementation. Continued opportunities to build professional knowledge and support of the QAR workforce will be developed and continued in 2024, with the continuation of CoP, offering CDA supports for QAR

participants, and the implementation of additional Teachstone curricula to support classroom practice change.

Information dissemination is an essential component of the QAR for multiple stakeholders in Missouri and across the U.S. Because the OCC and ECIC are choosing to incorporate cutting-edge assessment tools and methods, the project is attracting the attention of national thought leaders and researchers as an innovative approach. For example, one research opportunity is the examination of the relationship between CLASS and CLASS Environment scores and how these interactions could impact coaching and program improvement. The ECIC will continue to seek opportunities to message the outcomes of the work and valuable findings from the process.

The ECIC is grateful for the opportunity to partner with OCC in developing an early childhood quality improvement system for Missouri. The ECIC leadership is committed to providing QAR data and grounded insight to inform the process of creating a system that recognizes quality programs and practices. Over the coming months, the QAR project team and a group of identified stakeholders will support the OCC in designing additional components to the QAR project. This development will continue to facilitate the goal of state-wide program implementation in fall of 2024.

Appendices

- ⁱ Hamre, B.K., La Paro, K.M., Pianta, R.C., & LoCasale-Crouch, J. (2014). *Classroom assessment scoring system manual: Infant*. Baltimore, MD: Paul H. Brookes Publishing Co.
- ⁱⁱ La Paro, K.M., Hamre, B.K., & Pianta, R.C. (2012). *Classroom assessment scoring system manual: Toddler*. Baltimore, MD: Paul H. Brookes Publishing Co.
- ⁱⁱⁱ Teachstone (2022). *Classroom assessment scoring system 2nd Edition: Pre-K-3rd Observation Field Guide*. Teachstone.
- ^{iv} Talan, T. N. & Bloom, P.J. (2011). *Program Administration Scale: measuring early childhood leadership and management*, New York, NY: Teachers College Press.
- ^v Abel, M.B., Olson, B.D., Fromm Reed, S., Magid, M., & Jones, K. (2018). *Early Childhood Organizational Equity Assessment Validation Study*. McCormick Center for Early Childhood Leadership.
- ^{vi} Bloom, P.J. (2010). *Early Childhood Work Environment Survey*. Wheeling, IL: McCormick Center for Early Childhood Leadership, National-Louis University.
- ^{vii} Snyder, P., Hemmeter, M.L., Fox, L. (2022). *Essentials of Practice-Based Coaching: supporting effective practices in early childhood*. Baltimore, MD: Paul H. Brookes Publishing Co.
- ^{viii} Bailey, B. (2014). *Conscious Discipline: building resilient classrooms*. Oviedo, FL: Loving Guidance.
- ^{ix} McFarren Aviles, J. & Amadee Flores, E. (2022). *Hearing All Voices: culturally responsive coaching in early childhood*. St. Paul, MN: Redleaf Press.
- ^x Talan, T. N. & Bloom, P.J. (2011). *Program administration scale: Measuring early childhood leadership and management*. New York: Teachers College Press.
- ^{xi} Talan, T. N. & Bloom, P.J. (2011). *Program administration scale: Measuring early childhood leadership and management*. New York: Teachers College Press.